

LISTING OF THE CLAIMS

5 1. (currently amended) A An adhesive composition comprising

a) from 15 to 50 percent by weight of the total weight of the adhesive

composition of a block copolymer corresponding to the following formula:

$I-(B)_{\underline{n}^*}-(A)_m$, in which \underline{n}^* is an integer greater than or equal to 1, m an integer less than or equal to \underline{n}^* , B a polymer block directly bonded to the core I via a covalent bond, obtained by the polymerization of a mixture of monomers (B_0) comprising:

- from ~~90 to 100%~~ 92 to 98% by weight of at least one monomer (B_1) chosen from the group consisting of linear or branched C_1 - C_{12} alkyl acrylates,

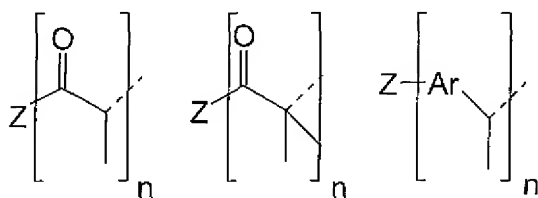
- from ~~0 to 10~~ 2 to 8% by weight of at least one monomer (B_2) chosen from acids and their derivatives, and their salts,

A is a polymer block directly bonded to the B block via a covalent bond, obtained by the polymerization of a mixture of monomers (A_0) comprising:

- from 95 to 100% by weight of at least one monomer (A_1) chosen from the group consisting of methacrylic monomers, styrene monomers and their derivatives,

- from 0 to 5% by weight of at least one monomer (A_2) chosen from acids and their derivatives, ~~such as acrylic acid, methacrylic acid and their sodium or potassium salts,~~

the core I being an organic group corresponding to one of the following formulae:



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Ia

Ib

Ic

in which Ar denotes a substituted aromatic group and Z is a polyfunctional organic or inorganic radical with a molar mass of greater than or equal to 14, Z is associated with n functional groups of acryl type in the formula Ia, with n functional groups of methacryl type in the formula Ib and with n functional groups of styryl type in Ic;

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- b) from 35 to 50 percent by weight of the total weight of the adhesive composition of at least one tackifying resin; and
- c) from 10 to 30 percent by weight of the total weight of the adhesive composition of at least one plasticizer.

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2. (currently amended) The ~~copolymer~~ adhesive composition according to Claim 1, wherein the said polyfunctional organic radical is selected from the group of radicals consisting of: 1,2-ethanedioxy, 1,3-propanedioxy, 1,4-butanedioxy, 1,6-hexanedioxy, 1,3,5-tris(2-ethoxy)cyanuric acid, polyaminoamines, polyethyleneamines, 1,3,5-tris(2-ethylamino)cyanuric acid, polythioxy, phosphonate and polyphosphonate.

3. (withdrawn) The ~~copolymer~~ adhesive composition according to Claim 1, wherein the said polyfunctional inorganic radical is chosen from the complexes of formula $M^{n+}O_n^-$, in which M is a magnesium, calcium, aluminium, titanium, zirconium, chromium, molybdenum, tungsten, manganese, iron, cobalt, nickel, palladium, platinum, copper, silver, gold, zinc or tin atom.

4. (currently amended) The ~~copolymer~~ adhesive composition according to Claim 1, wherein B_0 comprises:

- from 92 to 98% by weight of monomers B_1 and
- from 2 to 8% by weight of monomers B_2 .

5. (currently amended) The ~~copolymer~~ adhesive composition according to Claim 1, wherein B_2 is preferably acrylic acid.

6. (currently amended) The ~~copolymer~~ adhesive composition according to Claim 1, wherein A_0 comprises:

- from 95 to 98% by weight of monomers A_1 and
- from 2 to 5% by weight of monomers A_2 .

7. (currently amended) The ~~copolymer~~ adhesive composition according to Claim 1, wherein A_2 is preferably methacrylic acid.

8. (currently amended) The ~~copolymer~~ adhesive composition according to Claim 1, wherein the B block represents from 50 to 95% by weight of the total weight of the said copolymer.
- 5 9. (currently amended) The ~~copolymer~~ adhesive composition according to Claim 1, wherein the B block has a Tg of less than 0°C and ~~preferably of less than -30°C.~~
- 10 10. (currently amended) The ~~copolymer~~ adhesive composition according to Claim 1, wherein the B block has a weight-average mass of between 2000 and 300 000 g/mol, ~~preferably of between 10 000 and 200 000,~~ and a polydispersity index of between 1 and 3.
- 15 11. (currently amended) The ~~copolymer~~ adhesive composition according to Claim 1, wherein the A block has a Tg of greater than ambient temperature and ~~preferably of greater than 90°C.~~
- 12-16. (cancelled)
17. (cancelled)
- 20 18. (currently amended) Composition according to ~~Claim 17~~ Claim 1, wherein the plasticizer is chosen from trimellitate oils of ~~trimellitate~~ type, such as triethyl trimellitate, or predominantly naphthenic oils, such as Catenex N956 from Shell.
- 25 19. (currently amended) Composition according to ~~Claim 17~~ Claim 1, wherein the tackifying resin is chosen from the group consisting of resins based on rosins, on rosin ester, on polyterpene, on hydroxylated polyester, on terpene styrene, on pentaerythritol terpene or on terpene phenol (~~typically~~).
- 30 20. (currently amended) The adhesive composition of ~~Claim 17~~ Claim 1 comprising an adhesive tape or label.
21. (canceled)

22. (new) The adhesive composition of Claim 1 comprising at least one block copolymer corresponding to the following formula:

$I-(B)_{n^*}-(A)_m$, in which n^* is an integer greater than or equal to 1, m an integer less than or equal to n^* , B a polymer block directly bonded to the core I via a covalent bond, obtained by the polymerization of a mixture of monomers (B_0) comprising:

- from 90 to 100% by weight of at least one monomer (B_1) chosen from the group consisting of linear or branched C_1 - C_{12} alkyl acrylates,

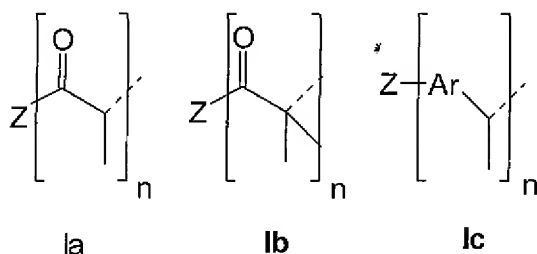
- from 0 to 10 by weight of at least one monomer (B_2) chosen from acids and their derivatives, and their salts,

A is a polymer block directly bonded to the B block via a covalent bond, obtained by the polymerization of a mixture of monomers (A_0) comprising:

- from 95 to - 98% by weight of at least one monomer (A_1) chosen from the group consisting of methacrylic monomers, styrene monomers and their derivatives,

- from -2 to 5% by weight of at least one monomer (A_2) chosen from acids and their derivatives,

the core I being an organic group corresponding to one of the following formulae:



in which Ar denotes a substituted aromatic group and Z is a polyfunctional organic or inorganic radical with a molar mass of greater than or equal to 14, Z is associated with n functional groups of acryl type in the formula **Ia**, with n functional groups of methacryl type in the formula **Ib** and with n functional groups of styryl type in **Ic**.